#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 13.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005814 Address: 333 Burma Road **Date Inspected:** 19-Mar-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1600 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Oregon Iron Works Clackamas, Or. **Location:** Clackamas, Oregon

**CWI Name:** See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Hinge K Pipe Beams

# **Summary of Items Observed:**

On this date, Caltrans Quality Assurance Inspector (QA) Sherri Brannon is present at the Oregon Iron Works, Inc. (OIW) jobsite in Clackamas, Oregon for the purpose of observing fabrication of the Hinge K Pipe Beams.

#### OIW Shop-Bay 1 (PQR-CS-067):

QA Inspector Brannon witnessed OIW welder Mr. Craig Jacobson ID#J6 and 1 helper welding Procedure Qualification Record (PQR) number CS-064. QA Inspector Brannon observed OIW QC CWI Mr. Scott Reed monitoring the PQR test. See Caltrans Welding Witness Report, TL-6032 dated March 19, 2008 for additional information.

#### OIW Fabrication Shop-Bay 3:

QA Inspector Brannon observed OIW qualified welder Mr. Tim O'Brien ID#O6 build up welding (due to the gap tolerance exceeding 5mm) on interior ring stiffener MK#b125. Mr. O'Brien was observed welding in the 1G (flat) position utilizing flux corded are welding (FCAW) process with a .045 inch (1.2mm) diameter electrode, filler metal brand Hobart Fabco 91K2-C class 91T1-K2J semi-automatic. QA Inspector Brannon questioned QC Inspector Mr. Mike Gregson about OIW using .045 inch (1.2mm) diameter electrode when the welding procedure specification WPS 3046 states Hobart 1/16 inch (1.6mm) diameter electrode. QC Inspector Mr. Gregson stated that he did know that production was using the Hobart electrode. Mr. Gregson spoke with production foreman Mr. Troy Smith about using the Hobart electrode. Mr. Gregson stated to QA Inspector Brannon that there was a mix up in communication on using the Hobart 1/16 inch (1.6mm) and that OIW has stopped the build-up welding process and will place a hold tag on the MK#b125 ring stiffener.

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## OIW Shop-Bay 3 (NCR):

QA Inspector Brannon issued a NCR on the above MK#b125 and the MK#a125 ring stiffener welded on 03/18/2009. See Caltrans Non Conformance Report, TL-15 dated March 19, 2008 for additional information.

## OIW Fabrication Shop-Bay 3:

QA Inspector Brannon randomly observed OIW personnel preparing positioner for welding forging MK#a111-1 (A508 Gr. 4N Class 2) to base plate MK#a110 (HPS 485 W) in preparation for welding.

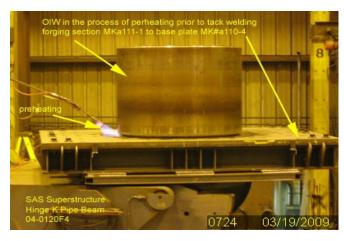
# Material, Equipment, and Labor Tracking:

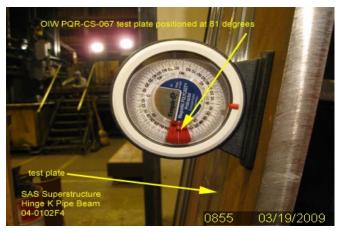
QA Inspector Brannon performed a verification of personnel at OIW. QA Inspector Brannon observed 2 Supervisor's, 3 Quality Control and 5 production personnel on this date.

The following digital photograph below illustrates observation of the activities being performed.









## **Summary of Conversations:**

As stated within this report.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural

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Materials for your project.

**Inspected By:** Brannon, Sherri Quality Assurance Inspector

**Reviewed By:** Adame,Joe QA Reviewer